

Fig. 1 is a schematic block diagram showing the construction of a conventional video coding system. For efficient video compression coding, there is generally used a

Page 3, Paragraph 2, lines 4-21:

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In a general video coding method and system, motion prediction and compensation operations are not performed on a frame basis, but in the unit of a predetermined number of picture elements or pixels (M pixels in the horizontal direction and N pixels in the vertical direction, typically indicated by MxN pixels). This group of pixels is typically called a macroblock. It is generally prescribed that the macroblock is sized with 16 pixels in the horizontal direction and 16 pixels in the vertical direction (referred to hereinafter as "16x16"). In the present invention, although the size of the macroblock is not limited to a specific value, it will be described as 16x16 as an example for the convenience of description. A motion vector is two-dimensional information indicative of the quantity of motion of an object in the reference and current frames on two-dimensional X-Y coordinates. Namely, the motion vector consists of a transversal motion value and a longitudinal motion value.

Page 7, Paragraph 1, lines 1-12:

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manner has a value selected to minimize the motion compensated error, not considering the coding efficiency of the motion vector. For this reason, a bit stream of a coded motion vector may exhibit a considerable difference in size even when a motion compensated error has a slight difference. There is a conventional method for conducting no coding when motion compensated errors resulting from a motion vector estimated in a motion search method and a zero vector are below predetermined threshold values. However, this method is only effective for frames with little variations. In other words, it cannot effectively perform a motion estimation operation for frames with variations.

Page 10, paragraph 7, lines 24-25:

Abbreviations used in the specification are defined as follows before describing the present invention in detail.